What is claimed is:

1. An extracorporeal pathogen reduction system comprising:
means for withdrawing blood from a patient;
means for separating a plasma constituent from the blood;
means for inactivating pathogen in the plasma constituent; and
means for returning treated plasma constituent to said patient.

2. The system of claim 1, wherein the means for inactivating the pathogen comprises adding at least one photosensitizer into the plasma constituent and providing photosensitized inactivation for inactivating pathogen at an effective amount of radiation.

3. The system of claim 2, wherein the photosensitizer is riboflavin.

4. The system of claim 2, wherein the photosensitizer is selected from a group consisting of vitamin K1, vitamin K2, vitamin K5, vitamin K6, vitamin K7, vitamin K-S(II), vitamin L, and alloxazine compounds.

5. The system of claim 2, wherein the effective amount of radiation is at least 1 Joule per ml of plasma constituent for a period at least 1 second of radiation time.

6. The system of claim 1, wherein the means for separating a plasma constituent from the blood comprises a blood filtration apparatus characterized by an orbital motion with filter membrane means.

7. The system of claim 6, wherein said filtration apparatus comprises a chamber having a hollow interior enclosed by a first plate, a second plate, and a flexible seal element between the first plate and the second plate, wherein the first plate is either essentially parallel to or at an acute angle to the second plate so as to form a chamber gap for the hollow interior; means for directing blood into the chamber gap; a non-rotational drive structure; said second plate

comprising the filter membrane means for separating plasma constituent from the blood, wherein the second plate is detachably coupled to said non-rotational drive structure that controls the second plate in an orbital motion in reference to a center axis of the first plate; a collecting means; means for directing the plasma constituent passing through said filter membrane means to said collecting means; and means for directing from the chamber gap a remaining constituent of the blood out of the chamber.

8. The system of claim 1, wherein the pathogen comprises aspergillus spp and candida spp.

9. The system of claim 1, wherein the pathogen is selected from a group consisting of Pseudomonas aerogenosa, Clamydia pneumoniae, and Mycobacterium tuberculosis.

10. The system of claim 1, wherein the pathogen is selected from a group consisting of HCV, HAV, HIV-1, HIV-2, HHV-6, HSV-1, HSV-2, CMV, EBV, rotavirus, adenoviruses, respiratory syncytial virus, parvovirus B19, Ebola virus, Varicella-zoster virus, poliovirus, Dengue virus, Haemophilus influenza, measles virus, mumps virus, and influenza viruses.

11. The system of claim 1, further comprising an anticoagulant.

12. A method of extracorporeally reducing pathogen burden of a patient comprising: filtering the patient's blood through a blood filtration apparatus configured for separating a plasma constituent from the blood; passing the plasma constituent through pathogen-reduction means for reducing the pathogen burden in the plasma constituent; and returning cellular components of the patient's blood back to said patient.

13. The method of claim 12, wherein the filtering step is carried out with the blood filtration apparatus comprising a chamber having a hollow interior enclosed by a first plate, a second plate, and a flexible seal element between the first plate and the second plate, wherein the first plate is either essentially parallel to or at an acute angle to the second plate so as to form a chamber gap

for the hollow interior; means for directing blood into the chamber gap; a non-rotational drive structure; said second plate comprising the filter membrane means for separating plasma constituent from the blood, wherein the second plate is detachably coupled to said non-rotational drive structure that controls the second plate in an orbital motion in reference to a center axis of the first plate; a collecting means; means for directing the plasma constituent passing through said filter membrane means to said collecting means; and means for directing from the chamber gap a remaining constituent of the blood out of the chamber.

14. The method of claim 12, wherein the pathogen-reduction means comprises at least one photosensitizer being added into the plasma constituent and a step of photosensitized inactivation with an effective amount of radiation to the plasma constituent.

15. The method of claim 14, wherein the photosensitizer is selected from a group consisting of vitamin B2, vitamin K1, vitamin K2, vitamin K5, vitamin K6, vitamin K7, vitamin K-S(II), vitamin L, and alloxazine compounds.

16. The method of claim 14, wherein the effective amount of radiation is at least 1 Joule per ml of plasma constituent for a period at least 1 second of radiation time.

17. The method of claim 11, wherein the pathogen-reduction means comprises an organic solvent being added into the plasma constituent in an amount and for a period of time sufficient to inactivate said pathogen, wherein the organic solvent is selected from a group consisting of ethers, alcohols, volatile chlorinated hydrocarbons, acetone and chloroform.

18. The method of claim 11, wherein the pathogen-reduction means comprises cyclodextrin being added into the plasma constituent in an amount and for a period of time sufficient to inactivate said pathogen, wherein the cyclodextrin is selected from a group consisting of an α-cyclodextrin, a β-cyclodextrin, a γ-cyclodextrin and a derivative thereof.

19. The method of claim 18, wherein the pathogen-reduction means further comprises cladribine being added into the plasma constituent in an amount and for a period of time sufficient to inactivate said pathogen.

20. The method of claim 12, wherein the pathogen is selected from a group consisting of HCV, HAV, HIV-1, HIV-2, HHV-6, HSV-1, HSV-2, CMV, EBV, rotavirus, adenoviruses, respiratory syncytial virus, parvovirus B19, Ebola virus, Varicella-zoster virus, poliovirus, Dengue virus, Haemophilus influenza, measles virus, mumps virus, influenza viruses, aspergillus spp, candida spp, Pseudomonas aerogenosa, Clamydia pneumoniae, and Mycobacterium tuberculosis.